AMENDMENTS TO THE CLAIMS:

Claims 28, 50-53 and 55 are amended. The following is the status of the claims of the above-captioned application, as amended.

Claims 1-27 (Canceled.)

28.   (Currently amended.) A method for identifying a catalyst of interest from a library of catalysts, said method comprising:

a) providing a library of catalysts comprising [[at least two different units, wherein each of said units comprises a catalyst attached to at least one substrate]] at least two different catalysts present in the library as individual units, each unit having the structure catalyst-substrate, wherein said catalyst is attached to said at least one substrate in a manner that allows a catalytic reaction to occur between said catalyst and said at least one substrate;

b) providing conditions suitable for said catalyst to catalyze the reaction of said at least one substrate to form one or more products, wherein at least one product of said catalytic reaction remains attached to said catalyst;

c) providing at least one reagent or condition which converts said at least one attached product to at least one substrate so as to regenerate said catalyst-substrate units;

d) repeating said b) and c) at least once; and

e) selecting said catalyst with the desired catalytic activity.

29.   (Previously presented) The method of claim 28, wherein said catalyst is biologically amplifiable.

30.   (Previously presented) The method of claim 28, wherein said unit is biologically amplifiable and said catalyst and said at least one substrate attached to said catalyst are attached on the surface of said biologically amplifiable unit.

31.   (Previously presented) The method of claim 28, wherein said catalyst is attached to said at least one substrate by a flexible linker.

32.   (Previously presented) The method of claim 28, wherein said catalyst is attached to said

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at least one substrate by a carrier system.

33.   (Previously presented) The method of claim 28, wherein said catalyst is attached to said at least one substrate by a flexible linker and a carrier system.

34.   (Previously presented) The method of claim 32, wherein said carrier system is a bead particle.

35.   (Previously presented) The method of claim 28, wherein said library of catalysts is a library of peptides or polypeptides.

36.   (Previously presented) The method of claim 35, wherein said library of peptides or polypeptides is a library of enzymes.

37.   (Previously presented) The method of claim 36, wherein said library of peptides or polypeptides is a library comprising recombined peptides or polypeptides.

38.   (Previously presented) The method of claim 36, wherein said library of peptides or polypeptides comprises shuffled peptides or polypeptides.

39.   (Previously presented) The method of claim 36, wherein said library of peptides or polypeptides comprises doped polypeptides.

Claims 40-47 (Withdrawn)

48.   (Previously presented) The method of claim 28, wherein the catalyst and the at least one substrate are different chemical substances.

49.   (Previously presented) The method of claim 28, wherein said catalytic library of interest is a library of peptides or polypeptides, and said method entails prior to said a), enriching said library of peptides or polypeptides to obtain a library of full-length proteins.

50.   (Currently Amended.) The method of claim 29, wherein said selecting [[step]] is

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p rformed by immobilizing said product molecule.

51.   (Currently Amended.) The method of claim 29, wherein said selecting [[step]] is performed by immobilizing said product molecule to an affinity column.

52.   (Currently Amended.) The method of claim 29, wherein said selecting [[step]] is performed by immobilizing said product molecule to a bead.

53.   (Currently Amended.) The method of claim 29, wherein said selecting [[step]] is preformed by immobilizing said product to a microchip.

54.   (Previously presented) The method of claim 29, wherein said catalyst and said at least one substrate are bound to a matrix, and wherein said catalyst is released from said matrix when said at least one substrate is converted to said at least one product by said catalyst.

55.   (Currently Amended.) The method of claim 29, wherein said selecting [[step]] is preformed by providing a column having at least one receptor that is able to bind said at least one product.

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